

REMARKS

Favorable reconsideration of this application, in light of the following remarks and discussion, is respectfully requested.

This Request for Reconsideration is in response to the Office Action mailed on August 29, 2005. Claims 1-4, 6, and 12 are pending in the Application and stand rejected.

In the outstanding Office Action Claims 1-4, 6, and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Freychet et al. (U.S. Patent No. 5,119,464, hereinafter "Freychet") and further in view of James II (U.S. Patent Application Publication No. 2003/0169179 A1, hereinafter "James").

Applicants respectfully submit that Freychet, and James, neither individually nor in any combination, support a *prima facie* case of obviousness of the invention recited in Claims 1 and 12. This is so because, even when combined, these references do not teach or suggest all the claimed features.

Claims 1 and 12 recite, among other features, a distinctive optical fiber (Claim 1) or an optical fiber cable comprising a plurality of optical fibers (Claim 12) each optical fiber comprising: *an optical fiber core, a colored layer over the optical fiber core, and a plurality of distinctive layers* disposed intermittently in a longitudinal direction of an optical fiber core between the optical fiber core and the colored layer, *each distinctive layer comprising fine drops of ink and taking a substantial linear shape, wherein a ratio of a total length of the distinctive layers to a length of the distinctive optical fiber is less than or equal to 1:5.*

As explained in Applicants specification, the present invention aims to obtain a distinctive optical fiber having a multi-distinctive function and low transmission loss. In order to obtain the above function, the distinctive optical fiber 1 comprises an optical fiber core 2, distinctive layers 3 and a colored layer 4. The optical fiber core 2 comprises a bare

optical fiber and an ultraviolet-rays hardenable resin coating the circumference of the bare optical fiber. A plurality of distinctive layers 3 including a plurality of fine drops 5 of ink with specific size are disposed on the optical fiber core 2 intermittently in a longitudinal direction of the optical fiber core 2. The colored layer 4 is disposed on the distinctive layer 3 and on the optical fiber core 2 where the distinctive layers 3 are not disposed (see specification, page 7, lines 4-14 and FIG.1A).

Distinctiveness and transmission loss of the distinctive optical fiber 1 are dependent on the occupied ratio of the distinctive layers 3 to the distinctive optical fiber 1. Therefore, under a condition that the distinctive layers 3 have a constant thickness and the colored layer 4 also has a constant thickness, the inventors have varied a ratio of the total length of distinctive layers 3 to the length of the distinctive optical fiber 1 (occupied ratio) to investigate an effect upon the distinctiveness and the transmission loss of the distinctive optical fiber 1 (Experiment 4). As a result of the above experiment, it was learned that a ratio of the total length of the distinctive layers 3 to the length of the distinctive optical fiber 1 should be set to be less than or equal to 1:5 (see specification, page 8, line 22; page 9, line 4; page 9, lines 14-18; page 16, line 12; page 18, line 9 and FIGS. 8A, 8B, and 9). Freychet does not disclose such recited features of the instant invention.

In Freychet, an optical fiber marking method and device are disclosed which operate on only a very short length of the optical fibers, require only very simple equipment, are not costly and ***do not modify the optical fiber characteristics*** (see Freychet, col. 1 lines 21-26). In order to obtain the above method and device, ink marks on an optical fibers 1 are differently spaced by continuously moving the optical fibers 1 from the left towards the right and reciprocating an ink jet marking head 2, above the optical fibers 1, in a direction perpendicular to the direction of forward movement of the optical fibers 1. Thereby, the

optical fibers 1 are identified unambiguously one from another (see Freychet, col. 2 lines 4-32 and FIGS.1 and 2). Here, it should be noted that *the optical fiber 1 of Freychet corresponds to the optical fiber core 2 of the present invention.*

Freychet et al. focuses not on a distinctive optical fiber characteristics (wherein the distinctive optical fiber is the optical fiber core with the distinctive layers covered with the colored laver in the present invention) but on an optical fiber characteristics (wherein the optical fiber corresponds to the optical fiber core of the present invention). Therefore, the subject matter disclosed and taught by Freychet is fundamentally different from that of the present invention.

Furthermore, Applicants invention clearly recites that a ratio of a total length of the distinctive layers to a length of the distinctive optical fiber is less than or equal to 1:5. The outstanding Office Action asserts that FIG. 2 of Freychet appears to disclose such a feature. Applicants respectfully disagree. Freychet is silent as to such a ratio and FIG. 2 has not been disclosed as being drawn to scale. As such, Applicants respectfully remind the Office that “it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” MPEP §2125, citing *Hockerson-Halberstadt, Inc. v. Avia Group Int’l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000). In addition, “absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value,” MPEP §2125, citing *In re Wright*, 569 F.2d 1124, 1127, 193 U.S.P.Q. (BNA) 332, 335 (CCPA 1977). As such, Applicants respectfully request substantial evidence in support of the unsubstantiated statement of conclusion that Freychet “appears” to shown a recited feature.

Applicants respectfully submit that James does not remedy the above-noted deficiencies of Freychet. James relates to obtaining a data transmission line from an oil or gas reservoir that can transmit electrical and optical signals in harsh well-bore conditions without constraints and design drawbacks (see James, page 1, paragraph 0009). Therefore, James also differs fundamentally from the present invention because James does not disclose or teach a distinctive optical fiber having a multi-distinctive function and low transmission loss.

In view of the above, the resulting combination of the disclosure of Freychet and James fails to teach or suggest the subject matter of Claims 1 and 12, that is, that a ratio of the total length of the distinctive layers to the length of the distinctive optical fiber is set to be less than or equal to 1:5 in order to obtain the distinctive optical fiber having a multi-distinctive function and low transmission loss.

Accordingly, Applicants submit that the rejection of Claims 1 and 12 under 35 U.S.C. § 103 (a) is improper at least for the above-noted reasons. Further, Applicants submit that the rejection of claims 2-4 and 6 under 35 U.S.C. § 103 (a) is improper at least by virtue of their dependency from Claim 1. As such, Applicants respectfully request reconsideration and withdrawal of the above-summarized rejection and an early indication of the allowance of Claims 1-4, 6 and 12.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-4, 6, and 12 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

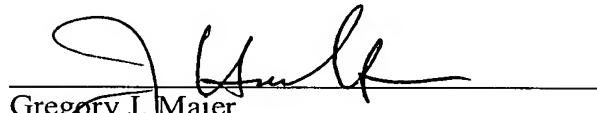
Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

GJM/RTP/MQM/fm

I:\ATTY\MQM\23's\239929US\RESP 12-29-05.DOC



Gregory J. Maier
Registration No. 25,599
Robert T. Pous
Registration No. 29,099
Attorneys of Record

James D. Hamilton
Registration No. 28,421